

DECLARATION AND POWER OF ATTORNEY

I, PATRICK J. CRILLY, declare that I am a citizen of the United States of America, residing at Peoria, Illinois, and that I believe I am one of the original, first, and joint inventors together with YI DONG, KEITH A. HERMAN, WAYNE R. TANNER, YUPING YANG AND FREDERICK W. BRUST of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING DISTORTION OF A MATERIAL DURING A WELD PROCESS

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:


Provisional Application Serial Number: 60/220,013

Provisional Application Filing Date: July 21, 2000

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Steve D. Lundquist, Patent Office Reg. No. 42,816, telephone (314) 849-4079, Joseph W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, Robert J. Hampsch, Patent Office Reg. No. 36,155, telephone (309) 675-5214, and R. Carl Wilbur, Patent Office Reg. No. 36,056, telephone (309) 675-5847, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Steve D. Lundquist, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


PATRICK J. CRILLY
Post Office Address:
1006 W. Moss Ave.
Peoria, Illinois 61606

Date

11/27/2000

DECLARATION AND POWER OF ATTORNEY

I, YI DONG, declare that I am a citizen of China, residing at Peoria, Illinois, and that I believe I am one of the original, first, and joint inventors together with PATRICK J. CRILLY, KEITH A. HERMAN, WAYNE R. TANNER, YUPING YANG AND FREDERICK W. BRUST of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING DISTORTION OF A MATERIAL DURING A WELD PROCESS

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

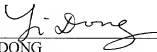
Provisional Application Serial Number: 60/220,013

Provisional Application Filing Date: July 21, 2000

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Steve D. Lundquist, Patent Office Reg. No. 42,816, telephone (314) 849-4079, Joseph W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, Robert J. Hampsch, Patent Office Reg. No. 36,155, telephone (309) 675-5214, and R. Carl Wilbur, Patent Office Reg. No. 36,056, telephone (309) 675-5847, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Steve D. Lundquist, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


YI DONG

11/27/2000
Date

Post Office Address:
6625 N. Big Hollow Rd.
Apt. 112
Peoria, Illinois 61615

DECLARATION AND POWER OF ATTORNEY

I, KEITH A. HERMAN, declare that I am a citizen of the United States of America, residing at Peoria, Illinois, and that I believe I am one of the original, first, and joint inventors together with PATRICK J. CRILLY, YI DONG, WAYNE R. TANNER, YUPING YANG AND FREDERICK W. BRUST of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING DISTORTION OF A MATERIAL DURING A WELD PROCESS

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

Provisional Application Serial Number: 60/220,013

Provisional Application Filing Date: July 21, 2000

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Steve D. Lundquist, Patent Office Reg. No. 42,816, telephone (314) 849-4079, Joseph W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, Robert J. Hampsch, Patent Office Reg. No. 36,155, telephone (309) 675-5214, and R. Carl Wilbur, Patent Office Reg. No. 36,056, telephone (309) 675-5847, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Steve D. Lundquist, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Keith A. Herman
KEITH A. HERMAN

11-27-00
Date

Post Office Address:

128 E. Elaine Ave.
Peoria, Illinois 61614

DECLARATION AND POWER OF ATTORNEY

I, YUPING YANG, declare that I am a citizen of China, residing at Dublin, Ohio, and that I believe I am one of the original, first, and joint inventors together with FREDERICK W. BRUST, PATRICK J. CRILLY, YI DONG, KEITH A. HERMAN AND WAYNE R. TANNER of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING DISTORTION OF A MATERIAL DURING A WELD PROCESS

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

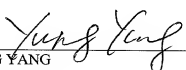
Provisional Application Serial Number: 60/220,013

Provisional Application Filing Date: July 21, 2000

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Steve D. Lundquist, Patent Office Reg. No. 42,816, telephone (314) 849-4079, Joseph W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, Robert J. Hampsch, Patent Office Reg. No. 36,155, telephone (309) 675-5214, and R. Carl Wilbur, Patent Office Reg. No. 36,056, telephone (309) 675-5847, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Steve D. Lundquist, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


YUPING YANG

9/1/00
Date

Post Office Address:
5806 Gaelic Ct.
Dublin, Ohio 43016

DECLARATION AND POWER OF ATTORNEY

I, FREDERICK W. BRUST, declare that I am a citizen of the United States of America, residing at Columbus, Ohio, and that I believe I am one of the original, first, and joint inventors together with PATRICK J. CRILLY, YI DONG, KEITH A. HERMAN, WAYNE R. TANNER AND YUPING YANG of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING DISTORTION OF A MATERIAL DURING A WELD PROCESS

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

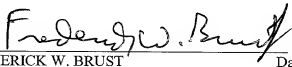
Provisional Application Serial Number: 60/220,013

Provisional Application Filing Date: July 21, 2000

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Steve D. Lundquist, Patent Office Reg. No. 42,816, telephone (314) 849-4079, Joseph W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, Robert J. Hampsch, Patent Office Reg. No. 36,155, telephone (309) 675-5214, and R. Carl Wilbur, Patent Office Reg. No. 36,056, telephone (309) 675-5847, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Steve D. Lundquist, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

 9/1/00

FREDERICK W. BRUST Date

Post Office Address:
183 W. Kenworth Rd.
Columbus, Ohio 43214

DECLARATION AND POWER OF ATTORNEY

I, WAYNE R. TANNER, declare that I am a citizen of the United States of America, residing at Decatur, Illinois, and that I believe I am one of the original, first, and joint inventors together with PATRICK J. CRILLY, YI DONG, KEITH A. HERMAN, YUPING YANG AND FREDERICK W. BRUST of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING DISTORTION OF A MATERIAL DURING A WELD PROCESS

the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

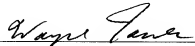
Provisional Application Serial Number: 60/220,013

Provisional Application Filing Date: July 21, 2000

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to be material to patentability as defined in §1.56. I further declare that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Steve D. Lundquist, Patent Office Reg. No. 42,816, telephone (314) 849-4079, Joseph W. Keen, Patent Office Reg. No. 28,432, telephone (309) 675-5753, Robert J. Hampsch, Patent Office Reg. No. 36,155, telephone (309) 675-5214, and R. Carl Wilbur, Patent Office Reg. No. 36,056, telephone (309) 675-5847, my attorneys and/or agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected with this application. Please address all correspondence to: Steve D. Lundquist, Caterpillar Inc., Intellectual Property Department, AB6490, 100 N.E. Adams Street, Peoria, Illinois 61629-6490.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


WAYNE R. TANNER

11/22/00
Date

Post Office Address:

1460 Masters Ln.

Decatur, Illinois 62521